

**BY ORDER OF THE COMMANDER
AIR MOBILITY COMMAND**

AFI 21-101AMC1 CL-4

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Maintenance

**C-9 DEBRIEFING
CHECKLIST**



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This checklist complements AFI 21-101AMC Supplement 1, *Aerospace Equipment Maintenance Management*, is formatted so that it may be trimmed to fit aircrew style binders.

This checklist supersedes AMC Form 521, **C-9 Debrief Checksheet**.

C-9 DEBRIEFING CHECKLIST

INTRODUCTION

This debriefing checklist will be used as a guide to assist the maintenance debriefer in ensuring that all pertinent information on a system malfunction is included on the AFTO Form 781A, **Maintenance Discrepancy and Work Document**. This checklist is considered minimal and is not intended to replace systems knowledge or common sense. The debriefer is charged with the responsibility of questioning the aircrew to make sure that all symptoms of a malfunction are known and recorded on the AFTO Form 781A. Remember this is the only information the technician will have to determine the source of the problem.

Recommended changes to this checklist will be forwarded through channels to HQ AMC/LGM.

I. Instructions: Prior to debriefing:

- A. The debriefing team members will review past debriefing forms, logs, or files to acquaint themselves with any previous repeat/recurring discrepancies.
- B. The appropriate maintenance specialty should be represented at the debriefing to help clarify discrepancies.

II. Debriefing Procedures.

- A. Utilizing this checklist as a guide, the debriefing team leader will take charge of the debriefing and debrief the flight crew.
- B. Review entire AFTO Forms 781A for the mission.
- C. Cross check previous repeat/recurring discrepancies against mission AFTO Forms 781A to see if they have occurred again.
- D. Check for discrepancies, which have recurred during the mission.
- E. Using the questions in the checklist, ensure that all open discrepancies are explained as completely as possible.
- F. Determine if aircraft was flown low level over salt water and act as necessary to comply with T.O. 1-1-691, *Aircraft Weapon System Cleaning and Corrosion Control*.
- G. Ensure **ALL** locations where the aircraft stopped and chemically disinfected for Foot and Mouth Disease, an entry is made in the 781A's. Debriefers will document this information in G081 using screen 9051, with work unit code (WUC) 02400 to create the Foot and Mouth Decontamination discrepancy; G081 will automatically enter this information in the aircraft history. Report this information electronically to HQ AMC/LGMJS@scott.af.mil. Accurate tracking is essential. Potentially damaging long-term effects of decontamination on sensitive aircraft parts may occur.

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SECTION I
AIRCRAFT DEBRIEFING CHECKLIST

1. Instruments (System 51)

a. Altimeter System

- (1) Which altimeter malfunctioned, pilot or co-pilot?
- (2) Did the malfunctioning altimeter revert to standby?
- (3) Was there an altitude split between the altimeters?
- (4) Did the affected altimeter stick, or rotate erratically?
- (5) Was the malfunction at a specific altitude?

b. Airspeed Systems

- (1) Which airspeed indicator malfunctioned, and at what airspeeds?
- (2) Was the airspeed or mach indication incorrect?
- (3) What was the weather conditions when malfunction occurred? (i.e., rain, freezing conditions)
- (4) Was the pitot heat in use during malfunction?

c. Mach Airspeed Warning

- (1) At what mach/airspeed did the system malfunction?
- (2) Was the mach/airspeed warning self-tested for operation?
- (3) Was there a split between the pilot and co-pilot mach/airspeed indicators?
- (4) Which mach/airspeed indicator was used for over-speed warning comparisons?

d. Stall Warning

- (1) What was flap position when the malfunction occurred?
- (2) Was there a “stall indication failure,” light on overhead annunciator panel, stick shaker, “stall” light on glare shield or warning horn?
- (3) Would system 1 or 2 test correctly?
- (4) Would system #1 and #2 test correctly?
- (5) What was slat position when malfunction occurred?

e. Speed Command

- (1) Did the systems test properly?
- (2) Was there a speed command flag in the pilot or co-pilot ADI?
- (3) What flap position did the malfunction occur?
- (4) Was there any associated “Bow Tie Lights” or Gyro flags?

f. Compass

- (1) Which compass malfunctioned, pilot or co-pilot?
- (2) Was the “OFF Flag” in view on the malfunctioning compass?
- (3) Was there a heading annunciation on either EHSI?
- (4) Did the slave indicator on the RMI work correctly?
- (5) Did the heading remain synched, or drift off?
- (6) What heading reference was in use? DG or INS?
- (7) Was the heading compared to the INS to determine the malfunctioning compass?

g. Auto-Pilot

- (1) Did the autopilot servo engage lever lock in engage position?
 - (a) If not, were the servos disengaged separately to identify the malfunctioning servo?
- (2) Was the autopilot problem pitch or roll related?
- (3) Was autopilot porpoising?
 - (a) Was pitch hold engaged did it correct the porpoising?
 - (b) At what altitude/airspeed did porpoising occur?
 - (c) What was aircraft configuration during porpoising? (i.e., cruise, descent, climb)
- (4) Did heading select work properly?
- (5) If autopilot does not follow HDG bug in HDG hold, does it work properly using turn knob?

h. Flight Director

- (1) Were there any flags in view?
- (2) What Nav. System was being used at the time of the malfunction?
- (3) Were the V-bars always out of view?
- (4) Were any systems components swapped to aid in troubleshooting?
- (5) Would tapping on indicator cause flags to pull from view?

2. VHF Communications (System 62)

a. No.1 and No.2 Receiver Malfunction

- (1) Was the problem in-flight or on the ground?
- (2) Was the problem associated with a particular audio control panel?
- (3) Was the problem with VHF/UHF/ 1,2 or both?
- (4) Was the problem with transmitting or receiving or both?
- (5) Was the receiver intermittently inoperative?
- (6) Was the receiver noisy? What frequency?
- (7) Did altitude affect malfunction?

- (8) If receiving was weak, what was the effective range?
- (9) What was/were the specific frequency(s) of receiver malfunction?

b. VHF Transmitter Malfunction

- (1) Was transmitter intermittently inoperative?
- (2) Was sidetone OK?
- (3) Was transmitter reported garbled by other stations?
- (4) Did altitude affect malfunction?

3. UHF Communication (System 63)

a. UHF Receiver Malfunction

- (1) Was the receiver intermittently inoperative?
- (2) Was the receiver noisy? What frequencies?
- (3) Was guard receiver satisfactory?
- (4) Did altitude affect the malfunction?
- (5) Was the receiver garbled?
- (6) Was the receiver inoperative or weak?
- (7) What was the effective range of weak receiver?
- (8) What specific frequencies malfunctioned?

b. UHF Transmitter Malfunction

- (1) Was the transmitter intermittently inoperative?
- (2) Was sidetone OK?
- (3) Was transmitter reported garbled by other stations?
- (4) Did altitude affect the malfunction?
- (5) Was the transmitter inoperative/weak?
- (6) What was the effective range of the weak transmitter?
- (7) What frequencies were malfunctioning?
- (8) How long after takeoff did malfunction occur?

c. High Frequency Radio

- (1) Was any fault lights on control head illuminated?
- (2) Which frequencies were inoperative?
- (3) Was the problem altitude related?
- (4) Did you have side-tone?
- (5) Was the problem related to a specific audio control panel?

4. IFF/TCAS (System 65)

- (1) Did the control panel display any mode failures or R/T fails during Self-Test?
- (2) If a mode C failure occurred, did you switch to the other DADC and retry the test?
- (3) Was the TVSI's operating properly, and pass the self-test?
- (4) Was any "traffic" showing on the TVSI?
- (5) Was IFF completely inoperative, weak, or intermittent?
- (6) Was malfunction reported by local center, several centers or all centers?
- (7) What codes were missing (Mode 1, Mode II, Mode III, Mode 4)?
- (8) Ident was OK, inoperative, intermittent or stayed on too long?
- (9) Were all audible annunciation's working properly?
- (10) Did TCAS fail the self-test?

5. Radio Navigation (System 71)

a. Marker Beacon

- (1) Was marker beacon inoperative, weak or intermittent?
- (2) Was inner, outer, or middle marker beacon light inoperative, weak or intermittent?
- (3) Did you have the sensitivity switch in high or low?
- (4) Was audio weak or noisy?

b. VOR/LOC

- (1) Was VOR/LOC weak or intermittent?
- (2) What frequencies were affected?
- (3) Did the RMI or FDI indications agree with the EHSI indications?
- (4) Were the Nav. Sources switched to determine if the failure was for the Nav. system or for the specific indicator?
- (5) Was audio weak or noisy?

c. TACAN Malfunction

- (1) Did the TACAN pass self-test?
- (2) Did the CDU status page record any TACAN failures, and if so, how many?
- (3) Did the TACAN bearing and DME lock on and track all stations selected?

d. Glide Slope Malfunction

- (1) Was glide slope weak or inoperative and on what frequencies?
- (2) What flags were in view on both the ADI's and EHSI's?
- (3) How did the glideslope compare between the ADI and EHSI?
- (4) Did you try switching Nav sources to determine if the failure was for the Nav system or the indicator?

6. Radar (System 72)

- (1) Did radar malfunction occur on the ground, in-flight, at all altitudes, at all tilt settings?
- (2) Did the focus, gain, intensity, and contour operate correctly?
- (3) Did range have any effect on the malfunction?
- (4) Which fault codes were illuminated?
 - (a) Was #1 gyro flag in view (#1 ADI)?
- (5) Were there any fault annunciation's on the scope?

(6)Did the radar display operate in the terrain mode?

7. Radio Altimeter (System 71)

(1)Does the system self-test properly?

(2)If altimeters were cycling on the ground, was there moisture or reflective paint located under the aircraft?

(3)Did the radio altimeter malfunction cause any other system malfunctions?

(4)Did the malfunction occur in both indicators?

8. INS (System 72)

(1)Would system align?

(2)Was the correct position loaded during alignment?

(3)Was the system allowed to fully align prior to moving the aircraft?

(4)Was drift rate excessive?

(5)Would the CDU accept and store waypoints?

(6)What malfunction codes were present?

(7)Was an error check accomplished after the flight and before turning OFF the INS?

9. FLIGHT MANAGEMENT SYSTEM (System 71)

(1)Was there any status bit failures? If so, what component?

(2)What malfunctions occurred? Could they be reset?

(3)If the problem was GPS related, did you switch the active GPS to the other side?

(4)If the problem was RAIM related, was the prediction page checked? Did you switch the active GPS?

(5)If applicable, did you try splitting the busses? If so, did it correct the malfunction?

(6)If the NOGO problem occurred prior to take-off, was a system self-test accomplished?

(7)Did all FMS switching function normally?

(8) If applicable to the malfunction, how satellites were being received at the time?

(9) Was the status page checked for other system malfunctions?

10. ENHANCED GROUND PROXIMITY WARNING SYSTEM (EGPWS)

(1) Was there any associated system malfunctions?

(2) Did you hear the audible warning?

(3) What were the warning call-outs?

(4) How was the aircraft configured at the time of the malfunction?

(5) What if any annunciators were illuminated?

(6) What was the position of the flap override switch?

(7) Did the EGPWS paint terrain on the radarscope?

(8) Was the terrain override switch depressed?

(9) Did you have normal GPWS operation?

(10) Was the EGPWS, W/S Fail, or Terr. Fail lights present?

SECTION III
POSSIBLE OPERATING CONDITIONS
CHECKLIST

1. Weather

a. Lightning Strike

- (1) Perform Special Inspection I.A.W. -6.
- (2) Where was approximate location of lightning strike?
- (3) Any noticeable system malfunction after lightning strike?
(i.e., circuit breakers opened, radios, etc...)

2. Flight

a. Bird Strike

- (1) Approximately, where did bird(s) hit?
- (2) Any noticeable engine flux, vibration, system failures,
radio failure, radar failure?

- (3) Where did incident occur? Aircraft location? Altitude? Speed?

3. Foot and Mouth Decontamination

a. Did the aircraft land at a base disinfecting for Foot and Mouth Disease (FMD)? (AS of May 2002, Spain and Italy require aircraft to be disinfected if they come from England). If so;

- (1) Was the aircraft disinfected? If so:
- (2) Was an entry made in the 781 using WUC 02400?
- (3) What was the chemical and concentration used?
- (4) What area(s) were sprayed?
- (5) How long did chemical solution remain on the aircraft?
- (6) How was chemical cleaned off?
- (7) What are the landing gear serial numbers (if sprayed)?

b. Make the following entries in the 781A:

- (1) Wash and lube due within 72 hours for the following areas chemically decontaminated for Foot and Mouth Disease: (list areas, use WUC 02400)
- (2) If landing gear were sprayed/disinfected, make the following entry, “visually identify the landing gear serial numbers and verify this information is accurately reflected in G081.
- (3) Report the following information electronically to HQ AMC/LGMJS, kurt.Westergaard@amc.af.mil
 - (a) MDS and complete tail number.
 - (b) Information from Section III, 3a, 1-6.

